PUBLIC WORKS AND UTILITIES COMMITTEE

09-056-0

ORDINANCE NO. _____

AN ORDINANCE ESTABLISHING A PROGRAM TO CONTROL INTRODUCTION OF FATS, OILS AND GREASE INTO THE SANITARY SEWER SYSTEM, AMENDING VARIOUS DEFINITIONS IN CHAPTER 43 OF THE CODE AND ADDING A NEW DIVISION 2 TO ARTICLE VI OF CHAPTER 43 OF THE CODE.

CITY PROPOSAL:

The city of Duluth does ordain:

Section 1. That Chapter 43 of the Duluth City Code, 1959, as amended, is hereby amended by renumbering Section 43-3.1 as Section 43-3.11 and by the addition of a new Section 43-3.1 which reads as follows:

43-3.1. Best management practices program (BMP program).

A program conforming to the requirements set forth in Section 43-50.1(b) below which establishes practices and procedures for addressing FOG issues as they affect a wastewater facility.

Section 2. That Section 43-3.6 of the Duluth City Code, 1959, as amended, is hereby amended to read as follows:

43-3.6.

- (a) Classes of uses. The division of wastewater facility users by waste characteristics, and process or discharge similarities;
- (b) Domestic user. Those users which discharge exclusively domestic strength, wastewater as defined in Section 43-3.40 below or wastewater which contains characteristics so similar to domestic strength wastewater as to be capable of treatment in the same manner as domestic strength wastewater;
- (c) Nondomestic wastewater user. A user which discharges wastewater other than domestic wastewater.
- Section 3. That Chapter 43 of the Duluth City Code, 1959, as amended, is hereby amended by the addition of a new Section 43-3.11.1 which reads as follows:
 - 43-3.11.1. FOG. Fats, oil and grease derived or containing

any biological substance or process.

Section 4. That Chapter 43 of the Duluth City Code, 1959, as amended, is hereby amended by the addition of a new Section 43-3.11.2 which reads as follows:

43-3.11.2. Food service facility (FSF). Any facility which prepares or serves food for commercial sale or distribution to any members of the public.

Section 5. That Chapter 43 of the Duluth City Code, 1959, as amended, is hereby amended by the addition of a new Section 43-3.11.3 which reads as follows:

43-3.11.3. Food grinder. Any device installed in the plumbing or sewage system for the purpose of grinding food waste or food preparation by-products for the purpose of disposing it into the sewer system.

Section 6. That Section 43-3.12.1 of the Duluth City Code, 1959, as amended, is hereby amended by the addition of a new section 43-3.12.1 which reads as follows:

43-3.12.1. Grease interceptor. A device designed to remove FOG consisting of a baffled and partitioned vault that is installed in-ground and outside the building which it serves.

Section 7. That Chapter 43 of the Duluth City Code, 1959, as amended, is hereby amended by the addition of a new Section 43-3.12.2 which reads as follows:

43-3.12.2. Grease trap. A device designed to remove FOG located within the kitchen of a FSF.

Section 8. That Chapter 43 of the Duluth City Code, 1959, as amended, is hereby amended by the addition of a new Section 43-3.29.1 which reads as follows:

43-3.29.1. Renovation. Any remodeling of, reconstruction of or modification of an FSF for which a building permit is required under the Minnesota State Building Code.

Section 9. That Chapter 43 of the Duluth City Code, 1959, as amended, is hereby amended by the addition of a new Section 43-3.30.1 which reads as follows:

43-3.30.1. Sanitary sewer overflow (SSO). An overflow, spill or diversion or release of wastewater from or caused by any blockage, disruption or damage to either a private or public sanitary sewer line, that causes wastewater to reach any waters of Minnesota or the United States, or any private or public property.

Section 10. That Section 43-3.37 of the Duluth City Code, 1959, as amended, is hereby amended to read as follows:

43-3.37. <u>Total</u> <u>Ssuspended solids (TSS)</u>. Total suspended solids in wastewater as determined under standard laboratory procedures as set forth in standard methods <u>as defined in Section</u> 43-3.34 above.

Section 11. That Section 43-3.40 of the Duluth City Code, 1959, as amended, is hereby amended to read as follows:

- 43-3.40. Wastewater. That portion of the spent water of a community which is polluted water. From the standpoint of source, it may be a combination of the liquid and water-carried wastes from residences, commercial buildings, industrial plants and institutions.
- (a) Domestic strength wastewater. Wastewater having an average daily suspended solids concentration of not more than 300 150 mg./1., an average daily BOD of not more than 300130 mg./1., an average daily phosphorus concentration of not more than 7 mg./1. and an average daily hexane soluble matter (grease and oil) concentration of not more than 40 mg./1;
- (b) Nondomestic strength wastewater. All wastewater other than domestic strength wastewater.

Section 12. That Chapter 43 of the Duluth City Code, 1959, as amended, is hereby amended by the addition of a new Section 43-3.40.1, which reads as follows:

43-3.40.1. Wastewater collection and transmission system (WCTS). Any system of publicly owned sewer pipes, lift stations and storage tanks utilized in the transmission of wastewater from a privately owned sewer system to a wastewater treatment facility.

Section 13. That Article VI of Chapter 43 of the Duluth City Code, 1959, as amended is here amended by designating existing Section 43-39 through 43-50 as "Division 1. General Provisions," and that a new Division 2 be added to said Article VI which reads as follows:

Division 2. FOG Program.

Sec. 43-50.1. FOG program participation required.

- (a) As of the effective date of this ordinance and thereafter, no FSF shall discharge any substance of any kind into any portion of a WTCS facility except in accordance with a BMP program which has been approved by the director in writing;
- (b) The city shall, from time to time, establish by resolution the minimum standards for the content of a BMP program;
- (c) No FSF shall discharge any substance of any kind into any portion of a wastewater facility which is not in conformance with the BMP program for that FSF.

Sec. 43-50.2. FOG prohibitions.

The following prohibitions apply to all FSFs:

- (a) Installation of food grinders in a plumbing or sewage system in any new construction or renovation of a structure designed to house a FSF;
- (b) Discharge any wastewater containing FOG into a wastewater facility except in compliance with the BMP program for that facility;
- (c) Introduction of any additives into the wastewater system for the purpose of emulsifying FOG or biologically or chemically

treating any substance introduced into any wastewater facility for purpose of treatment or pretreatment of wastewater, unless a specific written authorization by the director is obtained;

- (d) Discharge of wastewater from dishwashers to any grease interceptor or grease trap;
- (e) Discharge of wastewater at temperatures in excess of 140°F to any grease interceptor or grease trap;
- (f) Operation of grease interceptors if the unit has accumulated waste, both FOG and food solids, accounting for 25 percent or more of its wetted depth measured from the static water level to the interior tank bottom, with FOG and solids accumulation, exceeding 25 percent of the total operating depth of the grease interceptor;
- (g) Discharge of any FOG or any other solid materials removed from the grease control device to a WCTS.

FOG interceptors installation requirements.

Sec. 43-50.3.

- (a) Except as provided for in Section 43-50.5 below, any structure designed for or intended to be used for an FSF must have a grease interceptor installed prior to discharging any wastewater into a WTCS facility. Such grease interceptor must be constructed on the property occupied by the structure in a location outside of any building which allows unrestricted access at any time to city representatives for the purposes of inspection, sampling and testing. Such grease interceptor must comply with all conditions as set forth in the state of Minnesota Administrative Code, Sec 4715.1115 Exterior Grease Interceptors;
- (b) Property owners of new commercial construction structure designed to house multiple FSFs on a single parcel shall be responsible to install and maintain a single grease interceptor to

serve each individual FSF tenant unless a property owner demonstrates to the director that it is not practically possible to install and maintain a single grease interceptor to serve each individual FSF located in the structure in which case the director has the discretion to approve a plan for such structure providing for more than one grease interceptor or a combination of grease interceptors and grease traps to service such property, which approval shall be in writing. Said approved plan shall include the minimum number of grease interceptors and grease traps that can reasonably serve the structure and the BMP program shall specifically include service for all approved grease intercepts and grease traps;

- (c) The owner of any structure occupied by more than one FSF shall be jointly and severally liable with the owner of each FSF served by any grease interceptor or any grease trap for the servicing and maintenance of that grease interceptor or grease trap and for any servicing and maintenance of any wastewater facility located downstream from said structure to remove any accumulations of FOG therefrom;
- (d) The director may require existing FSFs and owners of structures in which such FSFs are located which have been identified as introducing FOG in the any portion of the wastewater system, and which introduction of FOG, in whole or in combination with other FOG contributors, has been responsible for causing the need for the city to clean such portion of the wastewater system more than twice in a single calendar year to install grease interceptors or other FOG equipment as deemed necessary to comply with this ordinance. Such installation shall be completed and operational within 180 days of notice by the director.

Sec. 43-50.4. Maintenance and cleaning of grease interceptors.

In the maintaining and routine cleaning of grease interceptors and any other grease control device, the owner of the FSF and the owner of the structure in which it is located, if different from the owner of the FSF shall be responsible for the proper removal and disposal by appropriate means of the captured material. If not performed by personnel under the direct control and direction of any such owner, such removal and haul shall be performed by currently licensed waste disposal firms.

Sec. 43-50.5. Exception from grease interceptor requirements.

If the owner of any FSF or of any structure in which an FSF is located or is to be located demonstrates to the reasonable satisfaction of the director that installation of a grease interceptor is not feasible, the director may grant an exception allowing such owner to install grease traps or other alternative treatment technology which will in his or her discretion adequately control the release of FOG from the FSF or the structure into the wastewater system. The FSF bears the burden of demonstrating that the installation of a grease interceptor is not feasible. The request for an exemption shall include the following information if relevant:

- (a) Evidence of a lack of available exterior space necessary to place an interceptor relative to the location of sewer main and easement;
- (b) Evidence of a lack of adequate slope for gravity flow between kitchen plumbing fixtures in the FSF and the wastewater facilities;
- (c) Description and specifications of the alternative grease control equipment that will be installed;

- (d) Evidence that the size, available seating or type of food preparation does not generate any significant volume of FOG. Sec. 43-50.6. Charge for remedial maintenance or repair of the city or WLSSD WCTS.
- In the event that the owner of an FSF or the owner of (a) any structure in which an FSF is located is found to have contributed to the partial or complete obstruction of a wastewater facility resulting from the discharge of wastewater or waste containing FOG and that the City or the WLSSD is required to act immediately to control a public health hazard because of such blockage, such owner shall be required to reimburse the city, the WLSSD or both for all costs of abating such condition. situations where there are multiple owners identified contributing to FOG causing such obstruction, the director will apportion the cost of the cleanup, maintenance or repair costs on a prorated basis, based on each owner's percentage share of the average total sanitary sewer charges for all such owners. Further should inspection, testing or other sampling activity by the city confirm that any user is contributing excessive FOG (including other harmful ingredients) and is causing the repair or extraordinary maintenance activity to maintain the integrity of the WCTS, the director or the WLSSD may require retrofitting of the structure with grease interceptors or grease traps, including testing facilities and access thereto sufficient to resolve the problem;
- (b) The costs for curing any private sewer lateral failures and SSOs, including cleaning and other maintenance, caused in whole or in part by FOG introduced into the wastewater treatment facilities by any FSF, alone or in conjunction with any other party, are the responsibility of the owner of the FSF and the owner of any

structure in which the FSF contributing the FOG to wastewater system is located.

Sec. 43-50.7. Penalties and assessments for FOG program noncompliance.

In the event that the owner of an FSF or the owner of any structure in which an FSF is located is found to have failed to comply with the provisions of this division, the following penalties or assessments or both may be applied:

- (a) For introduction of FOG into any wastewater facility resulting in obstruction to said facility or in an SSO:
- (1) The city may disconnect water and sewer service to the FSF and to the structure in which the FSF is located;
- (2) City may impose a fine of not more than \$1,000 per month until such owner demonstrates that the subject FSF or structure is in compliance with the requirements of this Division;
- (b) For failure to maintain records as required by the BMP program for any FSF, or failing or refusing to timely comply with any request for records required to be provided to the director, a fine of up to \$100 per day until such records are provided;
- (c) For failure to pass the FOG inspection due to lack of or ineffective FOG equipment the director may:
- (1) Require the subject FSF to install additional FOG equipment as necessary to resolve the problem;
- (2) Change the sewer rate class of the FSF to reflect the presence of the excessive FOG contribution by the FSF.

Section 14. This ordinance, except for the portion of Section 13 thereof numbered as Section 43-50.1 shall take effect 30 days from and after its passage and publication.

Section 15. The portion of Section 13 of this ordinance numbered as Section 43-50.1 shall take effect 30 days from and after its passage and publication or on April 1, 2010, whichever is later.

Approved:	Approved for presentation to council:
Department Director	Chief Administrative Officer
Approved as to form:	Approved:
Attorney	Auditor

PW&U/ATTY REA:blj 12/1/2009

STATEMENT OF PURPOSE: This ordinance establishes a program for addressing issues and conditions resulting from the introduction of fats, oils and grease, often referred to as "FOG" in the parlance, into the City's wastewater system by various food service facilities throughout the community.

The need for this ordinance arises from two sources. One is the need to address problems arising from the introduction of FOG by a relatively small number of food service facilities. Many of our local food service facilities do not cause measurable FOG problems but there are a limited number of such facilities that, because of the character of their operations and their practices, introduce material amounts of FOG into the wastewater system, causing restrictions or total blockages and requiring a disproportionate amount of cleaning by City crews. The cost of this additional work has historically been born by the entire system, increasing costs for all users.

The second need for this ordinance is to meet the requirements of the Consent Decree which the City entered into with the U.S. Environmental Protection Agency. One of the commitments the City made under that decree was that the City would enact an ordinance to control the introduction of FOG into the City's wastewater system, for the purpose of reducing restrictions in the City's sewer facilities and thereby reducing sanitary sewer overflows into Lake Superior.

This ordinance requires that food services facilities develop and follow a program of Best Management Practices ("BMP's") to prevent FOG from entering the City's wastewater system. This includes the installation of grease interceptor

facilities at locations where they can be easily serviced and monitored and their regular maintenance by appropriately trained personnel. It also provides for penalties for failure to follow the BMP's and requires that food service facilities that contribute FOG that obstructs the wastewater system be required to pay the cost of clean-up.